

R E M A R K S


In view of the present amendment and the foregoing remarks, therefore, it is believed that this application has been placed in condition for allowance, and reconsideration and allowance are respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Respectfully submitted,

YOUNG & THOMPSON

By



Robert J. Patch
Attorney for Applicant
Registration No. 17,355
745 South 23rd Street
Arlington, VA 22202
Telephone: 521-2297

October 11, 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 12 has been amended as follows:

--12. (amended) [A method] An arrangement according to claim 11, characterized in the at said arrangement comprises means for creating two intermediary directories for one user, means for establishing a connection between the user and the first intermediary directory on the basis of a first verification of the user, and means for establishing a connected between the user and the second intermediary directory on the basis of a second verification of the user, in which case the first and second verification are mutually different as regards the reliability (strength) typical of the verification procedure.--

several intermediary directories, in which case the access to the various intermediary directories requires a verification procedure of varying strength. The strength required of the verification process can be indicated in the access rights message together with the user identifier, in which case the intermediary records the access rights in such an intermediary directory of the user to which the access requires a sufficiently strong user verification.

If in connection with a confidential document it is wished to ensure that the user has received/used the document, this can be carried out for example in the following way. When the user sends to the intermediary directory a request that said document should be opened, the intermediary registers the request. Now also the document itself is transmitted to the user by the intermediary, so that the intermediary can also register the fact that the user has received said document. This type of document advantageously contains and identifier connected to the decoding of the encryption, which identifier is transmitted by the intermediary to the producer, which further registers the transaction. The producer transmits the encryption decoding key according to the identifier to the intermediary, who in turn transmits said key to the user. Thus it can be ensured that the user has received the document and wished to decode its encryption. In case for instance the data transmission connection should be interrupted, so that the user does not receive the encryption decoding key, the key can be requested again. In the user's terminal, there is advantageously arranged a program that can be loaded from the intermediary's server, for example in connection with the first request, and which program automatically sends the intermediary an acknowledgement to the effect that the encryption decoding key has been received.

In connection with network services, it may be necessary to prevent parallel usage of one and the same user link by several different users. This can be prevented for example so that the real link to the producer service is in the possession of the intermediary. Thus the first implementation of the service is always carried out through the intermediary's server, in which case there are verified both the user and the terminal from which the request is received. The request is transmitted to the producer completed with additional information, such as the identifier of the user and the terminal, possible time stamp etc. This enables the verification of an authorized user and the assignment of a so-called temporary certificate. Said information is encrypted by a pair of keys, which are known by the intermediary and the producer, and transmitted to the producer. An alternative solution would be that all service requests between the user and the producer were transmitted through the intermediary, in which case the existence of access rights could always be verified.

Figure 4 is a block diagram illustration an arrangement according to the invention for transmitting information. Said arrangement comprises the following elements connected to an Internet data network 430: a producer ^{equipment} 410, a user ^{equipment} 420 and an

intermediator's ^{equipment}terminal 440. The producer's ^{equipment}terminal 410 comprises the producer's server 411, which is connected to the Internet data network. The producer's server is provided with a database 413, in which there are stored the documents, the data services etc. available for the user. In addition, the producer's ^{equipment}terminal includes a register 412

5 comprising the information of the producer's clients/users. Said user information includes the client identifiers used by the producer, i.e. the user identifiers and the public keys of the users. On the basis of said information, the producer's server writes the access right messages transmitted to the intermediary.

The intermediary's ^{equipment}terminal 440 includes the intermediary's server 441, which is

10 connected to the Internet data network. The intermediary's server includes the database 448, in which the user-specific intermediary directories are recorded. In addition, the intermediary's server includes the user registers 446, which contain the necessary information of the users and of the user verification procedures, whereby the user is verified in order to grant access to one or several user-specific intermediary directories.

15 Moreover, the intermediary's servers includes producer registers, which contain information of possible data transmission encryption procedures used with various producers, as well as lists of the user identifiers used by the producers and of their respective identification with the users included in the intermediary's register.

The user's ^{equipment}terminal 420 can be an ordinary computer connected to the Internet data

20 network for instance by means of a modem, provided with the necessary browser programs and possible data transmission encryption programs.

Figure 5 illustrates an intermediary directory maintained by an intermediary, seen as it opens in the user's ^{equipment}terminal, 50. In the intermediary directory, there is represented the intermediary's name 51 and the user's name 52. Information of received link addresses is

25 represented as rows in the same fashion as in known email directories. As regards the received links, there are represented, in respective columns, the transmitter, the subject, the link and the date of the transmission. The opening of a received file is carried out by activating the desired link. The link address as such does not have to be represented in the user's directory, but the file can be opened for example by activating the 'subject' of the

30 desired link, in which case the file is looked up on the basis of the recorded link address.

In the specification above, only a few of the embodiments according to the invention have been described. Naturally the principle according to the invention can be modified within the scope determined in the appended claims, as regards the details and ranges of usage of the specific embodiment.